Social Aspects of Agricultural Credit

Benson Y. Landis

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SOCIAL ASPECTS *of* AGRICULTURAL CREDIT

Benson Y. Landis

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FOREWORD

The interest of religious bodies in agricultural credit has been manifest for a considerable time. In 1913, C. O. Gill, secretary of the Federal Council's Commission on the Church and Country Life, was a member of a group which studied rural credit in Europe. Recently Edwin V. O'Hara, Director of the Rural Life Bureau of the National Catholic Welfare Conference, made a study of this question in Europe. There are now 100 persons teaching agriculture under foreign mission boards and some of these are giving attention to reorganizing credit institutions in rural communities.

The desirability of a discussion of the agricultural credit situation was first brought to the attention of the Department of Research and Education by rural church leaders within the Council's constituency. The plan for the study was unanimously approved by those responsible for the organized rural church work in the Council's constituent bodies. The study was begun early in 1926 and completed during the summer of 1927.

The chief reason for the interest of religious organizations in the topic is that the agricultural situation is regarded by many people as one of the most pressing of moral issues. Statements have been made in the most conservative agricultural papers that the farmers, as a group, have not been adequately served by the credit institutions of the nation. One famous editor refers to a certain system for furnishing short term loans as "a curse." In many parts of the country interest rates for both short and long term credits are alleged to be exorbitant. The rural regions are said to give us some of the most glaring examples of usury. There are other sections of which it is declared that farmers are staggering under a burden of debt and at least one well-known economist has suggested that some of the mort-

gage debt should be "written off" by boards of adjustment representing creditors and debtors.

The purpose of the study is to summarize and interpret data upon agricultural credit in the United States during the period of 1920 to 1927, and to discuss certain aspects with which the churches and social institutions have been most concerned. This, therefore, is not a technical report, but rather an educational bulletin.

The discussion is begun with a brief statement of major agricultural developments during the period. Then follow interpretations of studies made by economists and government agencies, under the headings of long-term, intermediate, and short-term credit, with a brief summary statement entitled "How Adequate Are Our Credit Institutions?" Following this is a discussion of other questions which are of importance to those concerned with the social welfare of the people living on American farms: the matter of ruralizing the credit systems, governmental control over credit resources, usury, governmental assistance as opposed to local cooperation, and the relation of credit to social institutions.

This study was conducted by the rural committee of the Department of Research and Education. The members of this committee were: Edmund de S. Brunner, the Institute of Social and Religious Research, and the Moravian Country Church Commission; Ralph S. Adams, Board of Home Missions, Reformed Church in the United States; M. A. Dawber, Board of Home Missions and Church Extension, Methodist Episcopal Church; Edwin L. Earp, Drew Theological Seminary; C. J. Galpin, United States Department of Agriculture; Hubert C. Herring, Congregational Education Society; E. C. Lindeman, New York School of Social Work; H. N. Morse, Board of National Missions, Presbyterian Church in the U. S. A.; Henrietta Roelofs, National Board of the Y. W. C. A.; Benson Y. Landis, Secretary. The secretary compiled the data and wrote the manuscript. The other members of the committee rendered advice and assistance in the conduct of the study, read and criticized the

manuscript and approved it in final form. Others who approved the manuscript in final form were Malcolm Dana, Congregational Church Extension Boards, and H. W. Foreman, National Council of the Protestant Episcopal Church.

The manuscript was also submitted for critical reading to three agricultural economists who have given special attention to credit. These were Alvin Tostlebe, Columbia University; Claude L. Benner, University of Delaware; and Ivan Wright, University of Illinois. Acknowledgment is hereby made of their assistance, although the Department of Research and Education is solely responsible for the findings of this bulletin.

I. AGRICULTURE DURING THE PERIOD 1920-27

THE period of 1920-27 has been most eventful in American agriculture. It has been one of serious depression marked by low incomes of farm operators, tremendous shrinkage of capital value and low return upon capital invested. During this time there has been the rise of the farm bloc in Congress, a large volume of special agricultural legislation, a widespread development of the cooperative marketing movement, and a great controversy over the relation of the Federal Reserve Board to the depression.

Price Trends and Purchasing Power

The world war brought with it heavy demands from Europe for the farm products of the United States. The heavy production of the agricultural industry was rewarded by high prices resulting in comparatively large profits during the years 1914-19. With the reduction of war and post-war demands, which began to be felt early in 1920, came a period of decline in wholesale price levels and acute depression for agriculture. The indexes of wholesale prices showed more rapid decline for agricultural than for non-agricultural products. Through 1920 and 1921 the drop in prices continued. From 1922 to the summer of 1925 there was a general recovery of prices. They held fairly steady until the spring of 1926, when another gradual decline began. Again agricultural prices declined more rapidly than those of non-agricultural products. The result was that the index of purchasing power of the farmers' products was 82[1] during February, 1927, compared with 85 for 1926, 89 for

[1] *The Agricultural Situation*, Washington, D. C., March, 1927.

1925 and 83 for 1924. (In these computations, the average for the years 1910-13 is taken as the base, i. e., as 100.)

RETURN UPON INVESTMENT

The rate of return received by farmers upon their capital investment, as estimated yearly by the Bureau of Agricultural Economics of the United States Department of Agriculture[2] has been as follows:

Year July 1-June 30	*Rate Earned on Operator's Capital Investment*
1919-20	5.7 per cent
1920-21	4.2 per cent
1921-22	2.3 per cent
1922-23	1.2 per cent
1923-24	1.6 per cent
1924-25	3.2 per cent
1925-26	3.5 per cent

In this connection the report contains the following statement: "Comparable rates for other industries are not available for the years shown here, except for 1923, when all corporations reporting to the Treasury Department showed net incomes for capital and management aggregating $11,224,000,000 (before deducting interest and compensation to officers), on an investment of $102,-000,000,000, as recently estimated by the Federal Trade Commission. This is equivalent to 11.0 per cent on all corporate capital investment including reward for management, and compares with approximately 3.3 per cent for all agricultural capital and management for the same calendar year."

LABOR INCOMES

The labor incomes of farmers are also computed yearly by the Bureau of Agricultural Economics. The labor income is the net result obtained by deducting from the

[2]Crops and Markets, Washington, D. C., July, 1926.

gross receipts of a farm the expenses of operation and the interest upon the investment figured at 4.5 per cent. It is the common method used by agricultural economists in studying farm income. The figures are as follows:[3]

Year July 1-June 30	*Reward, per Farm Family, for Labor and Management*
1919-20	$917.00
1920-21	397.00
1921-22	270.00
1922-23	440.00
1923-24	533.00
1924-25	624.00
1925-26	648.00

It must be borne in mind, when considering these figures, that there are available for family living, products furnished by the farm usually worth $400 to $800 per family. The interest upon the operator's capital, which is arbitrarily deducted from the net income in order to figure the labor income, is also usually spent by the operator. In fact, studies of the Division of Farm Population and Rural Life of the Department of Agriculture indicated that 2,880 representative farm families had an average of about $1,500 (partly in supplies and house rent) for family living during 1923.

CAPITAL LOSSES

Declining income has resulted in a drop in the values of farm property since 1920. "The farmers of the United States sustained a loss of about $20,000,000,000 of their capital during the six years from January 1, 1920, to January 1, 1926. This was 25 per cent of their capital account at the earlier date. The value of farm land for the United States as a whole declined 31 per cent between January 1, 1920, and January 1, 1925."[4]

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[3] Ibid.

[4] Henry C. Taylor, formerly chief of the Bureau of Agricultural Economics of the United States Department of Agriculture. *Proceedings of the Academy of Political Science*, New York, January, 1927, p. 521.

INTERNATIONAL INFLUENCES

The period 1926-27 has revealed, perhaps more clearly than ever before, the influence of international trade upon farming in this country. The long-time trend of exports of farm products is downward. The world war occasioned only a temporary reversal of the long-time trend.[5] The emergence of the United States from the war as a great creditor nation, loaning huge sums to countries which have bought heavily of our farm products, has also added to the difficulties of the agricultural industry. Prior to the war, in the language of international trade, we paid Europe the interest on money she had loaned us by sending our exports from the farm and the factory. Now Europe owes us interest, is buying less of our farm products, and some of the nations, e. g., Italy, are making spectacular efforts to produce more of their own food. This factor has made the problem of disposal of the surpluses of certain of our major crops very acute, and "surplus control" has become a big political issue.

PECULIARITIES OF THE INDUSTRY

The low price level for agricultural products has been an especial burden for several reasons: Taxes upon farm property, which increased rapidly during the war years, have not declined. In certain extreme cases, as in Arkansas, farms have been sold in large numbers by county authorities because of non-payment of taxes. The *Chicago Daily News* reports (March 13, 1927, p. 18) an extreme illustration to the effect that in Oneida County, Wisconsin, in the "cutover area" of the northern part of the state, 90 per cent of the owners of land have failed to pay their taxes. The report received by this news-

[5] E. G. Nourse, *American Agriculture and the European Market.* New York, McGraw-Hill Book Co., 1922.

paper says that thirty counties of northern Wisconsin now find themselves owners of large areas of land because they cannot even find buyers of the tax certificates. It appears that farmers pay, in proportion to their incomes, higher taxes than any other economic group.[6] Land and equipment were purchased by large numbers of farmers at high levels during 1918-20 and interest upon large mortgages has to be paid out of slender incomes. Debts contracted in an era of expansion and prosperity became crushing burdens when prices fell. It must also be remembered that agriculture is unintegrated as compared with urban industry. It consists of six million units of production, freely competing. It adjusts itself slowly to changes in world business. Though groping toward integration, it has not yet been able adequately to cope with the pressing problems of the post-war period. It has been forced to commercialize itself without having developed the techniques of urban industry.

THE FARM BLOC

During 1921-27 a powerful farm bloc has been developed in Congress, which has secured the enactment of a large number of important agricultural laws.[7] Among these were the tariff acts of 1921 and 1922, which placed high duties upon imports of farm products but which, according to the only studies made, have had no important effect upon the agricultural situation;[8] the Agricul-

[6] See, for example, *Tax Burdens and Exemptions.* New York, National Industrial Conference Board, Report No. 64, October, 1923.

[7] See Robert S. Fletcher, "National Agricultural Legislation, 1902-25," in *Handbook of Rural Social Resources*, University of Chicago Press, 1926.

[8] See studies of the Institute of Economics, particularly the following: Mark A. Smith, *The Tariff on Wool*, New York, Macmillan Company, 1926. Lynn R. Edminster, *The Cattle Industry and the Tariff*, New York, Macmillan Company, 1926.

tural Credits Act of 1923 (to be discussed fully in Chapters 2 to 4); the Capper-Volstead Act aimed at encouraging the organization of cooperative marketing associations. Little is known of the effects of national agricultural legislation. One of the major controversies within agriculture is over the question whether the federal government can be of much direct assistance in the situation. During the past three years there has been an organized movement, particularly in the Middle West, to secure legislation which would set up a federal export corporation to dispose of the surpluses of six staple crops. This movement, which has centered around advocacy of the McNary-Haugen bill, has thus far been unsuccessful, although it has received considerable support from the West and the South.

COOPERATIVE MARKETING

During the years under consideration there was a rapid expansion of the cooperative marketing of farm products. There are now over 12,000 farmers' business organizations for buying and selling farm products. The total membership of these associations was 2,700,000 in 1925, and this figure represented an increase of 300 per cent over the year 1915.[9] About nine-tenths of these business organizations are established primarily for selling, although half of the total number do some purchasing for their members. The number which are "cooperative" is difficult to determine; moreover, it depends upon one's definition of the term. Previous studies indicate that the large majority, probably two-thirds or three-fourths of the organizations, were organized upon a plan different from that of the customary business corporation.[10] The large regional associations and the federations of local

[9] *Agricultural Cooperation*, United States Department of Agriculture, June 21, 1926, p. 273.

[10] Benson Y. Landis, *Pacemakers in Farmers' Cooperation*, New York, 1922, 16 pp. out of print.

associations have played a large part in securing marketing credit, a type which the individual farmer usually has difficulty in getting.

THE FEDERAL RESERVE BOARD AND THE DEPRESSION

The major developments which we have just noted have had their effect upon the credit institutions and controversy has raged particularly over the credit aspects of the great agricultural depression. In the latter part of the year 1919 industry in the United States was rapidly expanding, prices were high and bank loans were increasing rapidly. The holdings of paper of the Federal Reserve Banks of the United States were so large that they approached the legal limit, and the reserve ratios reached a low point. The Federal Reserve Banks make funds available to their member banks by a method known as rediscounting the commercial paper. By raising the rates of rediscounting, the Federal Reserve Board, which supervises the activities of the Federal Reserve Banks, could influence the tendency of expansion of credit on the part of member banks. This method was begun in December, 1919, and in May, 1920, the rates were rapidly advanced. Shortly thereafter the decline in agricultural prices began.

An analysis of this subject has been made by Claude L. Benner, who has conducted[11] studies of agricultural credits for the Institute of Economics. Dr. Benner states that expansion of the farm business and high costs of production made the amount of bank indebtedness of farmers particularly high in early 1920. "At the very time that this amount was at its highest, falling prices of agricultural commodities made the farmers both unwilling and unable to liquidate their loans. More than this, falling prices created a new demand for more

[11] "Credit Aspects of the Agricultural Depression, 1920-21." *Journal of Political Economy*, February and April, 1925, pp. 94-106, 217-33.

credit." Dr. Benner also quotes studies of the Congressional Joint Commission of Agricultural Inquiry to indicate that between May 4, 1920 (when the rediscount rate of the Federal Reserve Board was raised and the drop in prices began) and April 28, 1921, "the borrowings from the Federal Reserve banks by member banks located in agricultural counties had increased $127,600,000 or 56.6 per cent. During this same time the borrowings by banks in semi-agricultural counties had remained practically stationary, and the borrowings by banks in non-agricultural counties actually had declined $629,-100,000 or 28 per cent. For this purpose the counties were classified as agricultural when the value of their products was estimated to be not less than 80 per cent agricultural; semi-agricultural when the value of their products was between 50 and 80 per cent agricultural; and non-agricultural when the value of their products was less than 50 per cent agricultural. Out of a total liquidation of member-bank loans amounting to $882,-000,000, 94 per cent, or $827,000,000 was by banks located in the non-agricultural counties. During this year, on the whole there was practically no liquidation [of bank loans] in the agricultural districts."

The Congressional Joint Commission of Agricultural Inquiry, devoted the second of four volumes of its report to agricultural credit.[12] This report was completed on October 14, 1921, and printed in 1922. The Commission was critical of the policy of the Federal Reserve Board at several points; it contended that the Board should have raised its rediscount rate and thus checked business expansion earlier than it did; that the action when taken in May, 1920, was too drastic and that the drastic policy was too long continued, forcing too rapid a deflation upon agriculture. It held that the rediscount policy of the Federal Reserve Board was, during 1919 and 1920, "subordinated to the Treasury requirements," and that the

[12]Credit, Report No. 408, House of Representatives, 67th Congress, 1st Session, Washington, Government Printing Office, 1922.

rediscount rate was not raised earlier in order to help the Treasury float the Victory Loan. It contends that the policy of the Board resulted in great hardship and loss in the agricultural districts.

Professor Wesley C. Mitchell, recognized as an authority upon business cycles, made comments which would indicate his agreement with most of the contentions of the Joint Commission of Agricultural Inquiry in a paper read in 1922 before the 35th meeting of the American Economics Association.[13] He said: "The central issue in most discussions of what we did amiss in 1919 is the time at which the discount rates of Federal Reserve Banks should have been raised. Most competent judges seem to agree with the 'personal opinion' expressed on this point by Governor Benjamin Strong in his statement . . . . to the Joint Commission of Agricultural Inquiry. 'I believe,' said Governor Strong, 'if it had been possible, it would have been desirable for the Federal Reserve System to have advanced its rates at some point in the period between January and March, 1919'—instead of waiting until November.[14]

"Since our concern is with the future we need not stop to discuss Governor Strong's limiting clause—'if it had been possible.' Perhaps the Treasury's plans for floating the enormous Victory Loan in the spring [of 1919] really did make it impossible, or at least undesirable, to raise the Federal Reserve rates until that undertaking was accomplished. However that may be, we are justified in hoping that in the future such exigencies will seldom arise to prevent the Federal Reserve Board from adopting the policy which seems wise in the economic interest of the public. What most concerns us is that the governor of the largest Federal Reserve bank and many other experts believe after mature consideration that it would

[13] *The Crisis of* 1920 *and the Problem of Controlling Business Cycles. American Economic Review.*

[14] Hearing before the Joint Commission of Agricultural Inquiry, 67th Congress, 1st Session, part 13, p. 763.

have been desirable to raise rates before the boom began. His reason for this conclusion is that an adequate advance of rates would have moderated the expansion of business [15] and thereby diminished the severity of the crisis of 1920."

We should recognize here without going into more detail in this controversy, that in the business situation of 1920 the Federal Reserve Board did influence the credit market and business expansion by raising its rediscount rate; and that the Board may continue to influence business trends, particularly in a situation parallel to that of 1920, when member banks are borrowing heavily from the Federal Reserve banks.

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[15] Ibid.

II. STUDIES OF LONG TERM CREDIT

IN reviewing the agricultural credit situation, the information available will be considered under the three heads under which studies are generally made: (1) Long term credit, in the form of mortgages running from 3 to 40 years, usually employed for the purpose of purchasing the farm property but sometimes for development or purchase of equipment. (2) Intermediate credit, running for periods of six months to three years, usually for the purpose of development and for the purchase of equipment but sometimes also for production or marketing. (3) Short term credit, running for periods of six months or less, usually for purposes of production and marketing, but sometimes also for development of business and the purchase of equipment. Short term and intermediate credits are usually personal or collateral loans.

In an analysis of long-term credit during 1920-1927 several things stand out: about two-thirds of the total debt of 10,000 representative farmers in the United States in 1924 was in the form of long-term mortgage loans;[1] there has been an extensive development of the Federal Farm Loan System but some of its so-called cooperative features have been abandoned; there has been an increase in 1925, as compared with 1920, in the ratio of the value of mortgage debt to the total value of mortgaged farms, resulting in a heavier interest burden for farmers; there have been proposals for adjustment of the mortgage burden of farmers by boards representing creditors and debtors.

The Federal Farm Loan Banks

The largest single agency for supplying long term mortgage credit to farmers is now the Federal Farm

[1]United States Department of Agriculture, *Agriculture Yearbook*, 1924, p. 189.

Loan System. This was established by act of Congress in 1916 and began to function in the latter part of 1917. The system is supervised by the Federal Farm Loan Board composed of seven members. Six of these are appointed by the President of the United States and the Secretary of the Treasury is chairman ex-officio. The law of 1916 provided for two kinds of credit institutions under the supervision of this Board: (1) twelve land banks, set up in 12 regions of the country, serving local associations of farmers who borrow money through these banks; (2) joint-stock land banks, privately owned and managed, but regulated as the federal land banks.

We shall take up first the federal land banks. Each of these banks was established with a capital stock of $750,000, paid out of the United States Treasury. This capital stock subscribed by the Treasury is retired by purchases of stock by the local associations which are borrowing through the bank. It is required that each individual borrower purchase stock of the local association when he makes his loan, this subscription depending upon the size of his loan. The local association then purchases a similar amount of stock in the federal land bank, thus retiring some of the original Treasury purchase. At the end of the year 1925, the Treasury owned no stock in seven of the twelve banks. The original act establishing the banks required that, when the local farm associations had retired all of the Treasury stock in a bank, they should be allowed to elect six of the nine directors of the bank, the remaining three to be named by the Federal Farm Loan Board. As the system developed, the members of the Federal Farm Loan Board opposed passing the control of the banks to the elected representatives of the Farm Loan Associations. They alleged that farmers were not exercising sufficient initiative; that the Board had difficulty in securing the proper men to fill the office of secretary-treasurer in the local associations; that farmer-control might interfere with the sale of the bonds of the banks; that the cooperative features

of the plan were not appreciated by the farmers; that a continuation of control by the Board was essential to the efficient operation of the system.

The Agricultural Credits Act passed by Congress in 1923 contained provisions recommended by some of the members of the Farm Loan Board. It amends the act of 1916 which established the system and provides that when the local associations have purchased all the stock in a bank there shall then be seven directors; that the local associations shall elect three, by districts; that the Federal Farm Loan Board at Washington shall appoint three, by districts; that the Board shall name as a director at large one person from among three persons who shall have received the highest number of votes from the local associations for this office. Thus the original plan to set up a system of land banks controlled by local cooperative societies has not been realized, and considerable dissatisfaction has been voiced by the rural press and by farm leaders.

The funds loaned to farmers by the federal land banks are raised by the sale of bonds, which are sold to the public as tax exempt securities. Loans may be made for terms ranging from 5 to 40 years, at the option of the borrower. The majority of the loans run from 33 to 35 years, with the provision that after five years all or part of a loan may be paid by the borrower. The amortization plan calls for semi-annual payments, including the interest and a small amount for the retirement of principal. The rate of interest on loans through the federal land banks may not exceed 6 per cent, and was in 1925 not over 5½ per cent, depending upon the rate at which bonds can be sold by the banks. Two banks sold bonds at 4½ per cent and made loans at 5 per cent, though usually the rate to farmers is 1 per cent higher than the rate at which the bank secures its money from investors. One loaned money at 5¼ per cent.

A local farm loan association must have as members at least 10 farmers who borrow an aggregate sum of

$20,000. The maximum loan allowed to any one borrower is $25,000. There are about 4600 of these associations. At the close of business on September 30, 1926, 406,723 farmers were members of these associations. This number was approximately seven per cent of the farm operators of the country. Nearly every agricultural county in the United States has at least one of these associattions. There is one accessible to practically every farmer. In case none is accessible, a farmer may borrow through the federal land banks if a local bank will serve as the agent in the transaction. Loans may be made in an amount equivalent to 50 per cent of the appraised value of land plus 20 per cent of the appraised value of the insured permanent improvements. Appraisals have been conservatively made; the Federal Board has checked its appraisals with prices for sales of farms on which it has mortgages, and has established conservative methods.

The 406,723 borrowers had secured a total of $1,264,-677,719.00 from the 12 land banks up to September 30, 1926. This means that the average loan has been for about $3000. The greatest development of the system was during the years 1921-24. Since that time the number of loans and the average amount loaned have been declining. The proportion of defaults has also been increasing. In the report of the Federal Farm Loan Board for the year 1925 it was stated that "from organization to December 31, 1925, the federal land banks and the joint-stock land banks reported foreclosure proceedings on 10,803 mortgages, involving loans and accrued interest in the sum of $40,118,912.15. In number and amount these items are practically double the figures shown in our last annual report. . . . The banks reached a culmination of the adversity which affected agriculture generally during several preceding years. Actions in foreclosure do not necessarily mean that these banks made bad loans, but rather they were the victims of conditions which could not be foreseen. During 1925 they moved to that point in their operations where logically

they had to clean up some of the consequences of crop failures, deflation, and post-war developments."

The chief advantage of the federal land banks and of the farm loan associations has been that they have made available mortgage credit at low rates of interest. The organization of the banks has undoubtedly tended to keep the interest rates of other lenders lower and has also tended to make rates throughout the country more uniform than was the case before their organization.[2]

In this connection it should be noted that the functioning of the federal land banks has apparently had no appreciable effect in reducing the proportion of farms operated by tenants. One of the principal claims of those who urged the system was that it would enable more tenants to become owners. Apparently the unfavorable conditions in the agricultural industry have tended to prevent many tenants from becoming owners, and the accessibility of mortgage credit has not furnished a sufficient incentive.

THE JOINT-STOCK BANKS

The Federal Farm Loan Act also authorized the organization of land banks owned by lenders of money on mortgage to farmers. These are known as the "joint-stock" banks. Though owned by individuals and operated for private profit, they are supervised by the Federal Farm Loan Board. A bank may be organized by ten or more persons who must subscribe a minimum of $250,000 as capital stock. The organization of these banks was authorized by Congress because it was urged that farmers should have the opportunity to choose whether to borrow by joining a farm loan association or to borrow without joining such a local group. An in-

[2]For a brief critique of the Federal Farm Loan System see R. D. Kilborne, "The Federal Farm Loan System," *Bankers Magazine*, November, 1925, pp. 697-700.

dividual may borrow directly from a joint-stock bank, and the maximum loan that may be granted to one individual is $50,000, twice that obtainable from the federal land banks. As is the case with the federal land banks, loans may not exceed 50 per cent of the appraised value of the land, plus 20 per cent of the appraised value of the improvements. The appraised values are determined by official appraisers of the federal land banks. The money loaned by the joint-stock land banks is raised mainly by the sale of bonds, but the outstanding bonds of a bank may not exceed 15 times the amount of its capital and surplus. Each bank may operate in only two adjoining states. At first the joint-stock land banks were not very popular. Up to November, 1918, only nine had been organized. At the close of business on December 31, 1925, there were fifty-three. All but 10 states were being served. On September 30, 1926, the joint-stock land banks had made loans to 98,859 individuals and the average loan was about $7,500, as compared with about $3,000 for the federal land banks. The rates of interest are slightly higher than those of the federal land banks, since they must usually pay a higher rate of interest to their bondholders.

THE STATE AND NATIONAL BANKS

State and national banks furnish considerable funds for farm mortgages, though in some of the eastern states banks furnish practically none of the funds for this purpose. For example, a survey by the Department of Agriculture indicated that the agricultural loans of banks in Massachusetts in the year 1923 were only 1 per cent of their total loans, while the agricultural loans of the banks of North Dakota were 75 per cent of their total. The Department's survey indicated that in 1924 state and national banks put 4.5 per cent of their funds into farm mortgages, and that the average interest rates for

such loans was 6.89 per cent. This average varied from 5.3 per cent in New Hampshire, to 9.6 per cent in New Mexico. The interest rate of banks for mortgage loans usually does not vary with general credit conditions, because only a small proportion of their funds is thus employed. In 1914 state and national banks furnished about 20 per cent of the money going into farm mortgages. In 1921, they furnished only 17 per cent and in 1923 it was estimated that they furnished a still smaller proportion.[3]

OTHER SOURCES OF FUNDS

For fifty years life insurance companies have been one of the largest single sources of money for farm mortgages. Since 1914, when figures on the investments of these companies were first gathered, they have held approximately 20 per cent of all the farm mortgages in the country. In the year 1914 the life insurance companies put 39 per cent of their mortgage funds into farm mortgages; in 1921, 51 per cent of their mortgages were upon farm property. However, 1921 was a peak year for this type of investment.[4]

Three other sources of funds for farm mortgages for which comprehensive data are not available are private farm mortgage companies, former farm owners and private investors. Farm mortgage companies are located chiefly in the large cities of the agricultural sections; some of them do business in a reliable way and on a conservative basis but others charge high commissions for loans and loan money at comparatively high rates.

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[3]United States Department of Agriculture, *Agriculture Yearbook*, 1924, p. 195. This information is published in *Separate from Yearbook* 1924, No. 915, and is entitled *Farm Credit, Farm Insurance and Farm Taxation.* It is written by Nils A. Olsen, C. O. Brannen, G. F. Codisch and R. W. Newton. The information contained in this document will be referred to in this bulletin as "The 1924 Survey of Farm Credit."

[4]Ibid.

The Department of Agriculture "1924 Survey of Farm Credit" indicated that 21 per cent of the total indebtedness of farm operators who owned their farms was owed to farmers and to other individuals. Farmers in the East and Middle West depend more on this source of credit than those in other parts of the country.

STATE FUNDS

Various states have established funds to loan to farmers on mortgage. There has been considerable legislation during the past ten or twelve years. The matter was considered at one of the annual conferences of the governors of the states during President Taft's administration, and new legislation resulted. The school funds of certain states have been invested in farm mortgages for long periods, in the case of Connecticut since 1819. According to a study made in 1923 by the North Carolina State Land Commission, seventeen states have one or more of these funds, and had outstanding loans ranging from $14,700, in the case of Maine, to $40,000,000, in the case of South Dakota.[5] Twelve of these state systems are described by James B. Morman, former economist of the Federal Farm Loan Board, in a chapter in his book *Farm Credits In The United States and Canada.* (Macmillan, 1924.)

THE 1925 CENSUS FIGURES ON CREDIT

The agricultural censuses present data about the mortgage indebtedness of those farms which are operated or occupied by owners, including the value of the land and buildings, the amount of mortgage debt, and the ratio of the mortgage debt to value of the farms. For the last three censuses the figures are as follows:

[5]North Carolina Land Conditions and Problems, the report of the State Land Commission appointed by the General Assembly of North Carolina, Raleigh, 1923.

	1910	1920	1925
Value of Mortgaged Farms (Land and Buildings)	$6,330,236,951	$13,775,500,013	$10,790,244,351
Amount of Mortgage Debt	1,726,172,851	4,003,767,192	4,517,258,689
Ratio of Debt to Value	27.3%	29.1%	41.9%

Thus, between 1920 and 1925, the total value of mortgaged farms has decreased about $3,000,000,000, though the number of mortgaged farms was only slightly less—1,193,047 in 1920 and 1,128,207 in 1925. The ratio of debt to value is considerably higher. Also, the total mortgage indebtedness upon 1,128,207 farms in 1925 was a half billion dollars greater than that upon the larger number of farms—1,193,047—in 1920. The figures indicate the heavier indebtedness, and consequently heavier overhead costs of production, carried by farmers in 1925 as compared with 1920. These figures become more significant when it is recalled that price levels were also lower. The ratio of mortgage debt to value of property was 35.5 per cent in 1890, a period when new farms were being bought and large areas were still being developed in many of the western states. But the figure for 1925 exceeded it by over 5 per cent.

The proportion of farms operated or occupied by their owners and free from mortgage debt has been fairly constant for thirty-five years. It decreased slightly between 1890 and 1920, and then increased slightly between 1920 and 1925. The figures for all censuses since 1890 are as follows:

Farms Occupied or Operated by Owners That Were Free From Debt

1890	71.8%
1900	69.0%
1910	66.0%
1920	64.6%
1925	66.0%

PROPOSALS FOR "WRITING OFF" INDEBTEDNESS

Due to the fact that the purchasing power of agricultural products has been low, the ratio of mortgage debt

to value of the farms has been increasing between 1920 and 1925, as has been indicated in the 1925 census returns. This has made the interest burden very heavy. It is significant to note that there have been proposals to reduce it, just as some of the war debts of European governments have been written off. This was the recommendation of Senator Gerald P. Nye of North Dakota in an address at the Labor Temple in New York, November 28, 1926. Two other recommendations of a similar nature from well-informed sources may be noted here. The first is from *Farmstead, Stock and Home*, an influential paper published in Minneapolis, which dealt with the matter editorially in the May 15, 1926, number. The second comes from Dr. Richard T. Ely, formerly professor of economics at the University of Wisconsin, now director of the Institute of Land and Public Utility Economics, in an article in the April, 1926, number of *The Journal of Land and Public Utility Economics.*

THE LANDLESS MAN

In all plans and systems for farm mortgage credit, the landless man receives slight consideration and help. The Jewish Agricultural Society of New York City has made a remarkable demonstration in loaning money to poor, landless men and in adjusting them to agriculture. In North Carolina, Hugh McRae, a capitalist, has established several agricultural communities and assisted landless men. In California the state has sponsored the development of two such communities. The federal immigration authorities have assisted many in reclaimed areas. During the past six years, however, the emphasis in public policy has been upon how to assist those who were on farms, rather than to take measures to induce more to take up farming.

PREVAILING RATES OF INTEREST

Another matter of importance is the rates of interest upon mortgage loans. The rates of the federal land

banks and of the joint-stock land banks have been pointed out earlier and the fact noted that their extensive operations at low interest rates have probably tended to reduce and even to equalize the rates of other agencies.

Interest rates for mortgage loans were also discussed in the comprehensive 1924 survey of the Department of Agriculture.[6] Herein the studies of the Department were summarized as follows: "Interest charges of all credit agencies increased somewhat between 1914 and 1921. During the past few years [i.e. to 1924] general credit conditions have been easier and a decline in mortgage rates has resulted. . . . The loans of life insurance companies usually are made at relatively favorable rates. . . . The average rate on life insurance loans in 1923 was 5.36 per cent. In some states the rate was as low as 5.09 per cent, while in others the rate was as high as 8.48 per cent. . . . The interest rates on first mortgage loans of commercial banks in 1923 averaged 6.89 per cent. The variation in the rates on bank loans is much wider than that on life insurance loans, ranging from 5.3 per cent in New Hampshire to 9.6 per cent in New Mexico."

FACTORS INFLUENCING INTEREST RATES

A thorough study of the factors influencing farm mortgage interest rates was made by Clara F. Widger, under the Institute of Land and Public Utility Economics.[7] The findings may be summarized as follows: "Perhaps the most important correlation with farm mortgage interest rates is their inverse relationship to land values. . . . In general it may be said that the factors contributing toward high land values, directly or indirectly tend to

[6] U. S. Department of Agriculture. *Agriculture Yearbook*, 1924, pp. 208-19.

[7] "Farm Mortgage Interest Rates." *The Journal of Land and Public Utility Economics*, January, 1925, pp. 102-117.

bring about low farm-mortgage rates. These factors may be physical, economic and social; each one or all three classes may be especially important in a particular community. The principal physical determinants of land values and interest rates are climate, soils and precipitation. . . . Generally speaking, an annual rainfall of from 20 to 25 inches and a growing season of 120 days are thought to be necessary requirements for a favorable combination of weather conditions. . . . In discussing the economic factors influencing farm mortgage interest rates, we deal with the most direct determinant, that is, the local funds available for farm mortgages. The extent to which these funds exist naturally varies inversely with the interest rate. . . . The type of farming practiced involves a risk element which is directly reflected in the interest rate. The high degree of risk in a one-crop system is manifested in a high interest rate. . . . In all loans, the character of the individual desiring the loan is of great importance. . . . Eastern Wisconsin has the lowest interest rates in the United States because agriculture is diversified and because it is a great dairy region largely farmed by a thrifty German and Scandinavian population. The savings are sufficient to make it possible for one farmer to lend to another, thus avoiding all such extra expenses as overhead and appraisal. These farmers would rather lend their money at 4 per cent to neighbors where they may view every day the security of the investment, than buy first-mortgage bonds at 6 per cent on property in some other parts of the country."

SECOND MORTGAGE LOANS

Second mortgage credit is mainly obtained by farmers from land-selling agencies, banks and individuals. The 1924 Survey of the Department of Agriculture indicated [8]

[8] U. S. Department of Agriculture. *Agriculture Yearbook*, 1924, pp. 217-19.

that 19 per cent of the mortgage loans of banks (mainly located in southern and western states) were made on second mortgage security and 1 per cent on third mortgage security. In 1920, a study of 1000 owners who had obtained first mortgage loans from federal land banks indicated that half of them had obtained second mortgage loans with which to purchase their land. About 40 per cent of the second mortgage credit was advanced by sellers of the land who were relatives, 37 per cent by sellers of land who were not relatives, and about 23 per cent by agencies which were not sellers of the land. In this connection it is also stated: "There is a growing need and demand for second mortgage credit which has not as yet been adequately met." The interest rates on second mortgages are usually higher than those on first mortgages.

III. THE NEW INTERMEDIATE CREDIT SYSTEM

THE term "intermediate credit" has only recently come into use in considerations of agricultural credit. It is used to designate loans made for periods of from six months to three years. These loans are secured for purposes of development of the business, the purchase of equipment, production or marketing. For example, the producers of live-stock need loans for production and marketing for periods of from one to three years. The banks regard this as too long a term for their loans, and at least 75 per cent of the short-time loans made by banks to farmers are for periods of six months or under.[1] The customary method of taking care of producers who have needed a long period of "turnover" has been for the banks to renew their short-term loans. This has worked well in ordinary times, but when the supply of credit became stringent loans were frequently not renewed and this brought great hardship to the debtors. Professor Ivan Wright, of the Department of Economics of the School of Business in the University of Illinois, and one of the best known students of agricultural credit, states that "the local banks do not have adequate resources and enough diversification of business to serve the seasonal needs of agriculture in many of the best agricultural communities."[2] Certain producers have therefore contended that they need a type of credit which will bridge the gap between short-term bank loans and the longer term mortgage credit. This need was also plainly recognized by the two commissions which studied rural credits in Europe, in 1912.

Establishment of Intermediate Credit Banks

In the 1924 survey of agricultural credit, made by the Department of Agriculture, the following statement is

[1] U. S. Department of Agriculture, *Agriculture Yearbook*, 1924, p. 233.

[2] "Financial Aspects of the Agricultural Situation," *Bulletin of the American Institute of Banking*, April, 1926.

made: "The collapse in prices of farm products in 1920 and 1921 centered attention upon this problem as never before. The extension of the activities of the War Finance Corporation was made necessary by the inability of commercial banks to meet the credit stringency that developed. The Joint Commission of Agricultural Inquiry in its report urged upon Congress the need of providing better intermediate credit facilities for the farmer and these findings were indorsed by the National Agricultural Conference that met in Washington to consider the state of agriculture in the spring of 1922.

"These and other influences led to the passage of the Agricultural Credits Act in the spring of 1923. The principal object of this act was to establish a federal credit system through which farmers could obtain production and marketing credit for periods longer than those ordinarily supplied by commercial banks. It was not the intention of Congress that the new system should supplant the commercial banks already serving the farmers, but merely supplement these institutions in financing the needs of agriculture.

"The act provided for the establishment of 12 intermediate credit banks with districts corresponding to those of the federal land banks. The federal intermediate credit banks are government owned and operated. The law provided for each bank a capital of $5,000,000 subscribed by the federal treasury. . . . The funds from which loans are made to farmers are obtained in part through the capital stock subscribed by the Treasury and also through the sale of short-time debentures that are secured by the agricultural paper accepted by the banks. The 12 banks are jointly liable for all of the debentures issued by any of the banks. The debentures of the intermediate credit banks are tax-exempt, and, while not government securities, they are sold under close government supervision. A ready market, therefore, has been found for their sale.

"The intermediate credit banks do not make direct

loans to farmers. Their advances are made either in the form of direct loans to farmers' cooperative marketing associations or in the discount of agricultural and livestock paper for banks, livestock loan companies, and other credit institutions. . . . The direct loans which they make to cooperative marketing associations are secured by warehouse receipts or shipping documents on staple agricultural products. The following products . . . have been declared eligible for loans: corn, cotton, wool, tobacco, peanuts, broom corn, beans, rice, alfalfa and redtop clover seed, hay, nuts, dried prunes, dried raisins, and canned fruits and vegetables. The interest rate charged by the intermediate credit banks on direct loans to cooperative marketing associations may not be over 1 per cent above the interest rate at which the last issue of debentures was sold. . . .

"The federal intermediate credit banks may also discount, for local banks, livestock loan companies, and other credit agencies, agricultural paper with a maturity of six months to three years. The discount rate charged by the intermediate credit banks may not exceed by more than 1 per cent the rate paid on the last debentures sold. . . .

"Provision also has been made for the organization of agricultural credit corporations in regions where established credit institutions do not provide farmers adequate credit accomodations. These agricultural credit corporations may be organized by any group of citizens. They are organized under state law and must have a minimum paid-up capital stock of $10,000. The law provides that these corporations may rediscount agricultural paper with an intermediate credit bank up to ten times their capital and surplus. In some instances they have been established as subsidiaries of banks in order to relieve bank portfolios of slow agricultural paper. In other sections they have been organized by farmers and local business men for the purpose of providing a more ample supply of production credit. In still other parts

they have been set up as subsidiaries of cooperative marketing associations with the purpose of providing production credit for the members of the association. Many of the cooperative marketing associations have found their activities restricted by the credit arrangements of their members. Crops that are mortgaged to local lenders must frequently be sold when harvested in order to pay maturing notes. To meet this situation a number of state-wide agricultural credit corporations have been organized by the cotton and tobacco cooperatives. Some of these corporations have been formed to supply production credit and others to finance the delivery of mortgaged crops. They should all serve to reduce the dependence of the farmer upon local sources of credit and give him greater freedom to market his crop through the cooperative association."

An announcement on September 10, 1927, by the Federal Farm Loan Board indicates that the federal intermediate credit banks had outstanding in direct loans to cooperative marketing associations the sum of $15,582,215.03 and rediscounted commercial paper worth $47,955,328.79 for banks and agricultural credit corporations. During recent years the interest rate on direct loans has been around 4½ and 5 per cent, and the rate for rediscounts around 5 per cent. Those borrowing from the intermediate credit banks have preferred loans or rediscounts having a maturity of one year, with an understanding that proper renewals will be granted them.

A STUDY BY THE INSTITUTE OF ECONOMICS

A thorough study of the intermediate credit banks has been made under the auspices of the Institute of Economics by Claude L. Benner. Mr. Benner's conclusions, published in 1926, are as follows:

"1. Agriculture requires a considerable portion of its

credit accommodation for production and marketing for periods of six months to several years.

"2. In the past, country banks have extended this credit on short-time loans with promises of renewals. Frequently, however, the costs of the credit have been higher than a good security would warrant, and in times of credit stringency renewals have been difficult to obtain.

"3. Agricultural credit corporations can be employed far more effectively connecting farmers in capital-deficit areas with distant sources of loanable funds. However, for agricultural credit corporations organized under state laws, there are not suficient legal safeguards against unwise credit extension, and unless the intermediate credit bank management exercises careful supervision over these corporations they may develop so as to harm our credit structure.

"4. The federal intermediate credit system will be able to furnish agriculture with a dependable source of credit supply at costs commensurate with those paid by other industries so long as the intermediate credit banks can secure the funds through the sale of their debentures.

"5. The federal intermediate credit banks cannot insure farmers against a possible credit stringency in the future because they have no control over our general banking and credit policies. This control still resides in the Federal Reserve system.

"6. The most important function that the federal intermediate system performs in our credit structure is in furnishing a channel whereby credit institutions located in sections where local capital is scarce can readily reach the investors in surplus capital areas. This service can be made of great value, particularly to the livestock industry, the cooperative marketing associations, and to all farmers located in areas where local capital is insufficient for their needs." [3]

[3] Claude L. Benner, *The Federal Intermediate Credit System*, New York, Macmillan Company, 1926.

In the summer of 1926, when a large cotton crop depressed prices, money was made available through the intermediate credit banks to enable persons and organizations to hold cotton from the market and to stabilize it by spreading shipments over long periods.

The federal government has thus made available through these new institutions large sums of money in order to meet the need for intermediate credit, but, as the study made under the Institute of Economics indicates, the system that has been set up has not yet been fully tested. There are dangers of over-expansion, and certain changes may be necessary if it is to function to the advantage of agriculture.

IV. THE SITUATION AS TO SHORT-TERM CREDIT

TAKING up the situation as to short-term credit (i. e., loans for a term of six months or less), we we find that in certain areas "store credit" must be secured at very high rates; that there is an obvious shortage of short-term bank credit in the West and South; that local banks supply most short-term credit to farmers; that interest rates for credit of this type have decreased slightly during the past decade; that failures among small rural banks have been numerous; that the War Finance Corporation was an important agency supplying short-term credit from 1918 to 1924; and that cooperative institutions have a comparatively unimportant part in supplying short-term credit to farmers.

Importance of Short-Term Credit

"The total amount of short-term credit outstanding has been variously estimated at from 30 to 35 per cent of the total credit used by farmers."[1] A survey of 1,014 farms in North Carolina in the year 1921[2] indicated that 58.2 per cent of the operators made use of short-term credit during the year. Thirty-seven and one-tenth per cent of owner-operators and 75.8 per cent of the tenants required this form of credit. The annual requirements averaged $137.50 for owners and $224.10 for tenants. Fifty-six per cent of the short-term credit obtained by these farmers was of a "restrictive" nature, i. e., the lender had some control over the activities of the person to whom it is granted. One of the most common forms of restriction is the crop mortgage, whereby the lender has some powers in determining how a crop shall be

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[1] U. S. Department of Agriculture, *Agriculture Yearbook*, 1924, p. 219.

[2] C. C. Taylor and C. C. Zimmerman, Comp., *Economic and Social Conditions of North Carolina Farmers.* By the Farm Tenancy Commission of North Carolina, Raleigh, 1921.

sold. It was found that "four-fifths (81 per cent) of all [short-term] credit comes from merchants, 11.1 per cent from landlords, 6.4 per cent from banks and 1.6 per cent from other sources, mainly neighbors and relatives."[3] More than half the money borrowed by these families was used for the purchase of food, clothing and home supplies. The remainder was used for the purchases of fertilizer, tools and stock feed. A study of interest rates in that state (covering the loans of 800 farmers in the year 1922) indicated that the average interest charged by banks for short-term credit was slightly more than 6 per cent, as compared with an average of 26 per cent charged by merchants.[4] It is generally stated that merchant credit is prevalent in areas where banking facilities are not so highly developed, and that it is usually the only recourse of insolvent men for whom bank credit would not be available. (Thirteen per cent of the land included in the survey of the 1,014 North Carolina farms was being cultivated by insolvent men.) James B. Morman, until recently economist of the Federal Farm Loan Board, stated in 1924 that "investigations in Dane County, one of the chief dairy counties of Wisconsin, showed 60 per cent of the farmers carrying store credit."[5] The interest ranged from "11 to 15 per cent according to the location and type of farming."

Clarence Poe, editor of the *Progressive Farmer,* presented the results of his study of interest rates for merchant credit throughout the cotton belt in 1924 at the 1925 meeting of the American Country Life Association in Richmond.[6] "One of the particularly serious hazards of farming is that when the farmer gets behind . . . . the

[3]Ibid, p. 31.

[4]A large agricultural credit corporation has been a factor in bettering conditions for its patrons, who are, however, only a small portion of the farmers of the state.

[5]James B. Morman, *Farm Credits in the United States and Canada.* New York, Macmillan Company, 1924, p. 297.

[6]*Proceedings of the Eighth National Country Life Conference,* Richmond, Va., 1925. University of Chicago Press, pp. 26-27.

cost of credit for his living expenses is so devastating. Here in the South with our 'time-prices,' crop-mortgage system of credit, whereas the business man gets credit at six or eight per cent, the farmer really pays sixty to eighty per cent per annum. I made an investigation ten years ago and I made an investigation again last year, getting reports from hundreds of sources, from hundreds of farmers from Virginia to Texas, inclusive, finding the average 'time-prices' charge on eight different items. It was remarkable how uniform was the charge by communities and states. The averages were as follows for the whole cotton belt in 1924:

	Av. Cash Price	*Av. Time Price*	*Av. % Increase*
Corn, per bushel.....	$1.33	$1.58	18.8
Flour, per sack.....	1.63	1.92	17.7
Hay, per ton.....	24.08	29.06	20.7
Meat, per pound.....	.20	.23½	17.5
Oats, per bushel.....	.88	1.05	19.3
Lard, per pound.....	.17½	.21	20.
Sugar, per pound.....	.10	.12	20.
Molasses, per gallon.....	.91	1.09	19.8

"For credit items, when farmers purchase their supplies during the summer, they are charged twenty per cent more than the cash price. The average time price item runs let us say four months, which I believe is fair because of the fact that a very considerable proportion of the farmers and tenants are able to take care of their wants during the early months of the year and they only run out of cash entirely and have to depend wholly on the time merchant in the later period. At any rate, a heavy volume of this 'time-prices' business comes in July, August and September, maturing in November. If the farmer is paying a flat twenty per cent for his purchases above the cash price and that account matures in four months (and if it is not paid then it begins to draw legal interest), the farmer is really paying what is equal to sixty per cent a year."

The testimony of Aaron Sapiro, prominent organizer of cooperative marketing associations, in an address

before the Fourth National Cooperative Marketing Conference, Washington, D. C., January 12-15, 1926, was as follows:[7] "You might instance a state like Texas where they do not usually charge more than ten per cent interest. They will lend money to a man in the spring and then they will collect it on their crop lien about four months later. They won't even give him the $100 at the start. He signs a note for $100, and they give him $90, so that he first of all is paying a high interest on $10 that he didn't get. Second, they take the crop lien. They have already taken a full year's interest out, but the crop lien operates fairly fast. . . . So that in many instances . . . . the farmer finds himself paying about 30 per cent for his production credit. I illustrate this from Texas not because it is the worst of the states—far from it—but simply because it happened to come to mind."

The 1924 Survey of Farm Credit of the Department of Agriculture gives us the most recent data for the nation as a whole.[8] It is stated: "While commercial banks are by far the most important source of such credit, large advances are made by local merchants, implement dealers, livestock and produce commission firms, canning factories, fertilizer companies, cotton factors, livestock loan companies and private lenders." Available data deal largely with the part of the banks in furnishing credits. "During the year 1923 it appears that about 9.5 per cent of the total loans and discounts of the banks of the country were used in making short term loans to farmers. A relatively small part of bank loans and discounts in many of the Eastern states was used for such purposes. . . . On the other hand, the resources of banks in the South and West were more largely devoted to

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[7] *Cooperative Marketing Problems of* 1926. The National Council of Farmers' Cooperative Marketing Associations, Washington, D. C., p. 94.

[8] See also an excellent study by Ivan Wright. *Bank Credit and Agriculture*, McGraw-Hill Book Company, 1922.

financing the needs of agriculture, the banks of some states using well over one-half of their resources in making such loans . . . ."

SHORT-TERM CREDIT FROM BANKS

"According to the best available estimates it appears that the total personal and collateral bank loans outstanding December 31, 1920, amounted to about $3,870,000,000.[9] During the three following years there appears to have been a substantial decline in the volume of such loans, but it is probable that short-time bank loans still amount to around $3,000,000,000. Preliminary estimates indicate that the personal and collateral loans of banks to farmers in the early part of 1924 amounted to about 9.5 per cent of their total loans and discounts, compared with 13.3 per cent three years before. Short-time bank loans are made in considerable volume in all sections of the country, but the volume is especially large in the states of the Middle West, a number of the Southern states and in California . . . .

"About one-third of the total short-time bank loans to farmers are secured by collateral of one form or another. Mortgages on livestock are the most important collateral, loans thus secured amounting in 1923 to over 15 per cent of the short-time bank loans to farmers. Security of this kind is required especially in the range and cattle feeding states," for example, by more than half of the banks reporting from Wyoming. "Crop liens are used as security for about 6 per cent of the loans. This security is used most extensively in the South and a few of the Northwestern states. In Alabama, for example, over 29 per cent of the short-time bank loans to farmers in 1923 were secured by crop liens, and in Idaho 22 per cent of such loans were secured in this manner. Chattel

[9] V. N. Valgren and Elmer E. Engelbert. *Bank Loans to Farmers on Personal and Collateral Security.* U. S. Department of Agriculture, Bulletin 1048.

mortgages on farm machinery are taken by banks as security to a much smaller extent. The banks in 1923 reported that about 3.5 per cent of their loans were thus secured. It appears that the depression may have increased the use of this form of collateral in states such as North Dakota and Montana, where farm machinery was reported as security for over 14 per cent of the short-time bank loans. . . .

"During the year 1923 it is estimated that three-fourths of the short-time bank loans to farmers were made for periods of six months or less. Thirty-seven per cent of the banks reported that their loans averaged from three to six months, and 30 per cent reported that their loans averaged from one to three months. The length of short-time bank loans increases as one proceeds westward and south from the Atlantic seaboard. The percentage of loans over six months ranged in the West from 13 per cent of all short-time bank loans in Nevada to 65 per cent in North Dakota and in the South from 5 per cent in West Virginia to 59 per cent in Arkansas, and yet in only six states (North Dakota, South Carolina, Alabama, Mississippi, Arkansas and Louisiana) did loans for terms over six months exceed those for six months and under."

PREVAILING INTEREST RATES

Considering interest rates, the 1924 Survey of the Department of Agriculture states: "There has been a measurable decline in the cost of short-time bank loans during the last decade. The average rate of such loans in 1914 was 8.1 per cent. The rate declined somewhat during the war, rising to an average of 7.9 per cent in 1921, but thereupon declined again to 7.6 in 1923. What is even more encouraging is the fact that the decline has been most marked in regions where the level of rates has been abnormally high, particularly in the southern and mountain states. Between 1914 and 1923 the average

rate on short-term bank loans declined as much as 2.6 per cent in Oklahoma, 1.6 per cent in Alabama, and 1 per cent in Wyoming. Even with this decline the interest rates on short-term loans in some sections of the country remained relatively high. . . .

"There appears also to have been a decline in the use of additional charges [very common in agricultural districts]. The use of minimum balance requirements is reported by 3.3 per cent of the banks in 1923 as compared with 6 per cent of all banks in 1920, and 34 per cent of the banks indicated that they collected interest in advance in 1923 as compared with 40 per cent in 1921. This tendency toward more favorable costs of short-term bank loans is due probably in part to easier credit conditions that have obtained and to the larger flow of funds seeking investment to all sections of the country. . . ."

Data upon prevailing rates of interest for short-term bank loans in the year 1921 were given in a bulletin of the Department of Agriculture as follows:[10]

"Considering the average prevailing rate on short-time loans of $100 or more by geographic divisions, the lowest average is found for the Middle Atlantic States, namely, 6.01 per cent, and the highest for the West South Central States, 9.66 per cent. For individual states the lowest average is 5.98 per cent for New Hampshire, and the highest is 10.17 per cent for New Mexico. The smallest variation in the prevailing rate within any geographic division occurs in the Middle Atlantic States, where New Jersey has an average of 6 per cent and New York and Pennsylvania each 6.01 per cent. In the South Atlantic States, however, a variation of 2.72 per cent occurs between Delaware and Florida. For individual states, the largest variations in prevailing rates appear in Minnesota and Nevada. In Minnesota 9.44 per cent is the average for the northwest corner of the

[10]Department Bulletin No. 409. *Factors Affecting Interest Rates and Other Charges on Short Term Farm Loans.*

state and 7.42 per cent for the southeastern district. In Nevada three districts have an average rate of 8 per cent, while one district, the eighth, has an average of 12 per cent. . . .

"For the country as a whole, the difference between average prevailing rates on short-time loans of $100 or more and petty loans is only twenty-five hundredths of 1 per cent. In general, this variation is largest in the South Central states where the credit needs of the small tenant farmers are a marked feature of the rural credit situation."

FACTORS INFLUENCING INTEREST RATES

A summary of the factors which account for high interest rates on the part of banks in the agricultural districts has been made by Professor Ivan Wright.[11] "The factors affecting the rate of interest charged a farmer by a local banker are numerous, and no outside person can know these factors so well as the local banker himself. In fact, any classification or outline of these factors is sure to omit many of the hidden details of individual cases. But roughly the usual influences which raise the rates of interest to farmers may be enumerated as follows:

"1. The scarcity of deposits in the rural districts makes it a matter of policy for the banks to maintain high rates in order to eliminate unnecessary credit and thus keep enough liquid assets to meet the daily demands of the depositors. . . . 2. The farmer is not generally in such close contact with the local bankers as the business man. . . . 3. The paper offered by local bankers for rediscount must conform to specific requirements. This necessitates the bank keeping its rates up so that undesirable or too large a volume of credit will not be de-

[11] "Interest and Rediscount Rates in Relation to Farmers' Commercial Bank Credit," Ivan Wright, in *Money, Credit and Banking Principles*, New York, Harper and Brothers, 1926, p. 904.

manded. . . . 4. The local banker has practically a monopoly of the finances in his community. This is particularly true of the southern and western states, where the population is scattered over a wide area and seldom more than one bank is found in each country town. . . . 5. The irregular and unbusinesslike habits of the farmers in the payment of their loans justifies the bankers in charging higher rates to compensate them for the farmers' negligence. . . . 6. Farmers need a longer maturity for short-time credit than that required by commercial enterprises. This long maturity of farmers' notes ties up the banks' resources, and unless disproportionate rates are charged, which discourage considerable borrowing by farmers, the banker will find himself in an embarrassing situation when customers ask for cash. . . . 7. Loans to farmers in many sections of the country are very speculative; for example, the frequent drought-stricken areas of Texas and Montana, and the weevil infested areas of the cotton growing states; consequently higher rates are justifiable. . . . 8. The local bank that is not a member of the Federal Reserve System and is not able to rediscount its paper with some large city bank correspondent, is greatly hampered in its ability to meet demands beyond very definite limits no matter how secure the paper is. . . . 9. The size of the loan is an important consideration in the rate charges. It costs as much for overhead, clerical service, time, insurance and the like to make a loan of $10 as of $10,000, and often because of the necessary safeguards thrown around small loans, the costs for making them are greater than the larger loans. . . . 10. If the farmers were organized and borrowed collectively the rates should be less than to any individual because the cost of making a loan to a group is much less than making a separate loan to each farmer, and the security of the group is considered much more reliable than that of an individual farmer. . . . 11. The natural conditions and the character of the type of farming practiced influence the rates

of interest. Where the soil is poor or the farming speculative, as a one-crop district or fruit growing section, the loans for productive purposes are higher than in a rich fertile soil where diversified farming is practiced and crop failures are seldom. . . . 12. The character of the farmer himself, when known to the local banker, influences the rate of interest. . . ."

FAILURES AMONG RURAL BANKS

A matter of great importance in a consideration of short-term credit is the evidence that the small banks in rural communities are declining in numbers and that the supply of credit available for farmers is being more concentrated than ever in the urban centers. Professor H. Parker Willis of Columbia University compiled figures upon the number of bank failures between January 1, 1920, and August, 1925, and presented these before the committee on Banking and Currency of the United States Senate in February, 1926. His figures are given in the published hearings of this committee, upon S. 1782 and H. R. 2 were as follows:

Per Cent of Banks Operating in January, 1920, Which had Failed by August, 1925

Alabama	5.1	Nebraska	11.3
Arizona	34.5	Nevada	..
Arkansas	6.4	New Hampshire	.8
California	1.2	New Jersey	..
Colorado	13.6	New Mexico	55.3
Connecticut	.5	New York	.2
Delaware	..	North Carolina	10.6
Florida	8.3	North Dakota	29.6
Georgia	20.7	Ohio	.7
Idaho	25.7	Oklahoma	19.0
Illinois	2.4	Oregon	8.7
Indiana	1.3	Pennsylvania	1.0
Iowa	8.1	Rhode Island	4.2
Kansas	7.6	South Carolina	18.9
Kentucky	2.9	South Dakota	28.2
Louisiana	10.1	Tennessee	2.7
Maine	.6	Texas	9.7
Maryland	1.1	Utah	9.0
Massachusetts	1.3	Vermont	..

Michigan	.3	Virginia	4.3
Minnesota	10.6	Washington	7.6
Mississippi	5.9	West Virginia	2.1
Missouri	6.2	Wisconsin	3.2
Montana	40.8	Wyoming	46.3

It will be seen that in eight predominantly agricultural states more than one-fifth of the banks had failed.

The *Magazine of Wall Street* (Jan. 29, 1927) publishes a significant statement by William S. Marlowe in regard to the failure of 671 banks during the first ten months of 1926. It is estimated that 850 banks, 4 per cent of the total number, suspended during the full year. In the Federal Reserve districts of New York, Boston and Philadelphia there were practically no failures, but in others (those having most of the rural banks) over 7 per cent of the existing institutions closed their doors. This has happened during a year when money was plentiful and at a time when it is estimated that due to price declines and the gain in volume of production, 8 per cent less bank credit was needed for the country as a whole than in 1919.

Mr. Marlowe points out that it has been commonly stated that the reasons for the frequent failures of rural banks is too small a capital and surplus. But officials of the Federal Reserve System whom he interviewed state that the successful banks in the regions where failures are most frequent have on the average practically the same capital as the insolvent banks. Therefore he finds the reasons for failure in banking practice.

Explanations of the frequent failures in rural districts, as commonly given by banking executives and by economists, may be summarized as follows:[12] (1) The deflation period came upon many bankers who were unprepared for it; (2) country bankers have frequently failed to diversify their borrowings—i. e., they have tied up all their loanable funds in farmers' notes (which tend to

[12]Many of the reasons are discussed in "Why Banks Fail," by Robert P. Crawford. *The Country Gentleman*, January, 1927, p. 8.

become frozen assets) instead of putting a portion into readily marketable securities; (3) many rural bankers are untrained; (4) many rural bankers have indulged in speculative side-lines and have neglected their banking business; (5) rural banks have tended to have insufficient capital and a small volume of business; in many areas there have been too many banks for the available business and keen competition has caused failures; (7) small-town banking has been unprofitable, as compared with the business in the cities.

It is also alleged that the lack of diversification of investments by small bankers has tended to raise interest rates, because a high interest rate is used as an effective instrument by the banker in order to discourage loans.

The decline of the small bank is frequently lamented by rural life leaders. They allege that the supply and control of the farmers' credit is tending to be centralized in the cities. This is looked upon as undesirable because it takes away the personal contact between the farmer and his banker and because it may result in neglect of agriculture on the part of the urban managers of the banks.

THE FEDERAL RESERVE BANKS

Certain changes in the regulations of the Federal Reserve Banks must be noted here. There are about 30,000 commercial banks in the United States, less than one-third of which are members of the Federal Reserve System. The 20,000 state banks outside the Federal Reserve System have about half the resources of the 10,000 national and state banks which are members, but those which are outside are largely small institutions located in the agricultural districts, and are heavily depended upon by the farmers. The Federal Reserve Act has been amended from time to time in order to enable the Federal Reserve Banks to give more service to agriculture. The Reserve Banks may now rediscount notes, drafts and bills of exchange issued or drawn for agri-

cultural purposes. The term of this paper may be for nine months, while other commercial paper must have a maturity not exceeding ninety days. A Reserve Bank may also rediscount the paper of a cooperative marketing association, if the proceeds of the loan are to be used as advance payments to members upon the delivery of crops; such paper may also run for nine months. Federal Reserve Banks may now also rediscount sight or demand drafts drawn to finance the domestic shipment of non-perishable readily marketable staple crops, which are secured by bills of lading or shipping documents. Bankers' acceptances drawn for agricultural purposes with a maturity of six months may be rediscounted, though for other industries the maximum maturity is ninety days. By the terms of the Agricultural Credits Act of 1923, the capital requirements for the admission of banks as members of the Federal Reserve System were changed, making 4,000 more banks eligible for membership. Only a few of these have made application and have become members, however. All of these provisions are probably the result of political agitation by the farmers' organizations for the purpose of making the Federal Reserve System more serviceable for agriculture.

OTHER SOURCES

The 1924 studies of the Department of Agriculture contained the following information about other sources for short-term credit for farming: "A substantial volume of credit is advanced to livestock farmers through livestock commission firms. A large part of such advances has been made on feeder cattle. The firms making these loans not only purchase the cattle for the farmer, but require that the cattle be sold through them when marketed. In this manner the firm which advances the credit maintains a control over the marketing of the product. A situation more or less similar has obtained in the truck crop and fruit-growing industry.

In highly specialized truck-crop and fruit-producing centers the grower is frequently unable to obtain the necessary credit from local agencies, and therefore seeks assistance from fruit and vegetable commission dealers and brokers in northern and eastern cities. In obtaining such credit assistance the grower often relinquishes all control over the marketing of his crop and is compelled to rely on the dealer's judgment in securing for him an adequate return. The degree of control exercised by commission dealers by reason of these advances varies from almost no control in some districts to almost complete control in other sections. In many of these truck-crop and fruit districts local banking resources are not sufficient with which to finance the needs of the growers. In other districts the hazards are so great that local credit agencies do not care to assume the risks attaching to advances of credit. Usually, where much dependence is placed upon the commission firms, the cost of credit is high and the control exercised over the marketing of the products is frequently unsatisfactory to the grower."

THE WAR FINANCE CORPORATION

The War Finance Corporation was an important agency for supplying emergency short-term credit. This agency operated between April 8, 1918, and November 30, 1924. Its operations are generally divided into two periods; the first ran from 1918 to the passing of Agricultural Credits Act of August, 1921, when the powers of the corporation were broadened in order to allow it to finance agricultural organizations more extensively; the second ran from August, 1921, to November, 1924, when the corporation ceased making loans and began winding up its affairs. Loans were made to cooperative marketing associations and to banks engaged in financing agricultural marketing. Fifty-six per cent of the total loans of the War Finance Corporation were made for other than "war purposes" and during the second period,

88 per cent of the loans went to assist the marketing of agricultural products. The amount advanced for agricultural marketing during the second period was $297,933,939.

COOPERATIVE INSTITUTIONS

Cooperative credit institutions play a very small part in supplying short-term credit for farmers. Although almost half the states have laws permitting the operation of credit unions, most progress has been made in New England and in North Carolina. In North Carolina the state furnishes good supervision and personnel for promotion. There are thirty-five local credit unions, thirty of which are rural.

V. HOW ADEQUATE ARE OUR CREDIT INSTITUTIONS?

IN THE previous chapters we have endeavored to present statistics upon the agricultural credit situation, insofar as data have been gathered by government departments and economists. This section is a summary of the studies that have just been reviewed, aiming to answer briefly certain questions as to the adequacy of the existing credit institutions and of the supply of credit available for conducting the farm business.

At first glance it might be said that this is a point on which "the doctors disagree." There are numerous statements made, some contending that farmers have not sufficient credit and others that they have enough or too much. For example, J. B. Morman, in his *Farm Credits in the United States and Canada*, says:[1] "The agitation during the past few years for more short-time credit did not arise from farmers, who have had more credit than they can digest. On account of natural and economic conditions, thousands of farmers have been unable to pay off their loans at maturity, so that their debts had to be carried by the banks, and the agricultural cooperative associations which had advanced them credit. Many private and state banks were unable to stand the strain of so many defaulted payments on short-time loans and a large number of them failed during the years 1920 and 1921.

"It was to render financial assistance to country banks and agricultural cooperative associations that new legislation was recently advocated and enacted. If credit stimulates increased production, as is claimed, then it is plain that plenty of short-time credit has been available to farmers and stockmen because there has been no shortage in either branch of farm production. As a

[1]New York, Macmillan Company, 1924, pp. 297-8.

matter of fact, there has been a large surplus and a curtailed market for staple crop and animal products, with the result that prices fell so low as to make it impossible for farmer debtors to sell their crops and livestock at a profit. Thus, the expansion of farm credit became a two-edged sword which, when wielded unwisely and too freely wounded seriously both creditor and debtor."

The leading editorial in the *Country Gentleman* of October, 1926, reads: "Any plan that presents more credit as the chief instrument for farm relief will not meet either the wishes or the requirements of the majority of American farmers. This is the opinion not only of this publication but of the farmers themselves."

On the other hand, the United States Commission to Investigate and Study Rural Credit Systems came to the conclusion:[2] "One of the first very definite and fundamental observations which must be accepted as a result of an examination into the characteristics of financial institutions in this country which serve farmers, so far as credit is concerned, is that they were not constructed to serve the special needs of the farmers. Because the financial institutions have not been constructed to serve the special needs of the farmers, other institutions, such as stores of all kinds, and persons who are the purchasers of and dealers in farm products, have often been forced to furnish the financial aid necessary."

The Joint Commission of Agricultural Inquiry expressed a similar opinion as follows: "The debacle of prices in 1920 and 1921 reduced the farmer to a condition worse than he has suffered under for thirty years . . . . The commission believes that these difficulties are due in a measure to the credit restrictions and limitations of the past eighteen months, and in part to the fact that

[2]Report of the U. S. Commission, Senate Document No. 380, 63d Congress, 2d Session, Part III, p. 10.

the banking machinery of the country is not adequately adapted to the farmer's requirements."[3]

Professor Ivan Wright of the University of Illinois, in a note in his *Readings in Money, Credit and Banking Principles*,[4] points out: "The needs of the agricultural industry were not taken into consideration in the early development of banking facilities. Farmers have had, therefore, much difficulty at times in securing adequate credit at what they considered a fair rate of interest."

The Production Credit Committee of the National Council of Cooperative Marketing Associations reported at the meeting of the Council[5] in January, 1926:

"You cannot have orderly marketing of a crop which is produced under a system of crop liens and crop mortgages, unless you can arrange with those who provide production credit for the orderly liquidation of that credit; hence, he who provides production credit usually controls the marketing of the crop under mortgage." The dependence of cooperative marketing upon control of production credit has been one of the outstanding factors in limiting the operations of all the southern cooperatives which have handled cotton and tobacco during the past five years.

However, the data reviewed in this study are sufficiently conclusive, in spite of conflicting statements about the supply of agricultural credit, to warrant a brief summary, as follows:

1. There is apparently agreement among students that the national banking system was developed without sufficient consideration of the peculiar needs of the agricultural industry.

2. The newly established Intermediate Credit Banks have made a promising beginning in supplying funds on

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[3]Credit. 67th Congress, 1st Session, Report No. 408. Washington, Government Printing Office, 1922.

[4]New York, Harper & Brothers, 1926, p. 904.

[5]*Proceedings of the Fourth National Cooperative Marketing Conference*, Washington, D. C., January 12-15, 1926, p. 90.

agricultural paper having a maturity of from six months to three years. They make loans directly to cooperative marketing associations and rediscount the paper of banks in the agricultural regions. They are thus meeting one of the most obvious shortcomings of the national banking system, and are supplying funds at low rates of interest. The system has not been fully tested, however, and there are dangers that through overexpansion it may have a detrimental effect upon the industry.

3. Certain amendments to the Federal Reserve Act permit the federal reserve banks to accommodate the agricultural industry to a growing extent. The federal reserve banks may now discount agricultural paper having a maturity of nine months whereas the limit of the maturity of paper of other industries is ninety days. The term "agricultural paper" has been more liberally and broadly defined. The banks are also now permitted to discount sight or demand drafts drawn to finance the domestic shipment of non-perishable, readily marketable staple crops, and they may also discount bankers' acceptances drawn for an agricultural purpose having a maturity of six months, whereas those drawn for the purpose of aiding other industries may not have a maturity exceeding ninety days.

4. During the past decade there has been a slight decline in the cost of short-time bank loans for farmers. Studies of the United States Department of Agriculture previously quoted, indicate that in 1914 the average rate was 8.1 per cent. There was a decline during the war, and an increase to 7.9 per cent during 1921. In 1923 the rate was 7.6 per cent. The average rate in some western states, because of various economic and physical factors, is practically twice that in a few New England states.

5. There is undoubtedly a serious shortage of short-time bank credit in certain parts of the country, notably in southern and western states. In North Carolina in 1921 "more than half of all the credit obtained for current expenses [of farmers] was advanced by stores and

less than one-sixth by banks. Advances from landlords to tenants were almost equal to all short-term bank advances to farmers.[6] That farmers depend extensively upon costly merchant credit in other areas is also indicated by a study made in New York under the direction of Professors W. I. Myers and G. F. Warren.[7]

6. Costly merchant credit is putting agriculture under a heavy burden in these areas. The North Carolina study of 800 farms in 1921, states: "The average rate of interest charged for short-term advances from banks was 6.3 per cent, as compared with 26.6 per cent from stores."[8] Clarence Poe, one of the foremost agricultural statesmen of the South, declares: "In any sincere and thoughtful discussion of farm business and finance, the crop-lien or crop-mortgage 'time-prices' credit system of the South must have attention. It is the curse of our section."[9]

7. There are evidences that the control of short-term bank credit is passing from the rural community to the urban centers, taking away, in many instances, the personal contact between the farmer and his banker. There were eight agricultural states in which more than one-fifth of the banks in existence in 1920, failed between January, 1920, and August, 1925. Failures of rural banks have continued throughout 1926.

8. The Federal Farm Loan System expanded rapidly during the period 1920-27, which we are considering, but the cooperative features of the plan have not developed as was anticipated by the framers of the act. The business of the joint-stock land banks, which are privately

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[6]Fred R. Yoder, H. D. Beardsley and A. J. Honeycutt, *Farm Credit in North Carolina—A Survey of* 800 *Farms.* North Carolina Department of Agriculture Bulletin, May, 1926, p. 2.

[7]Leland Spencer, *An Economic Study of Rural Store Credit in New York.* Ithaca, N. Y., Cornell University Agricultural Experiment Station, Bulletin 430, 1924.

[8]Yoder, Beardsley and Honeycutt, op. cit., p. 2.

[9]Editorial, *The Progressive Farmer,* October 17, 1925.

operated but supervised by the Federal Farm Loan Board, has within the past two years been increasing more rapidly than that of the federal land banks which serve the local associations of borrowers. Various members of the Federal Farm Loan Board have from time to time opposed local control of the federal land banks and the Agricultural Credits Act of 1923 has virtually eliminated local control. These members of the board have alleged that there has been a lack of local initiative and responsibility, though there is dissatisfaction in regard to the present status of the banks among some farmers' organizations.

The expansion of the Federal Farm Loan System (including the joint-stock banks) has made available $2,000,000,000 for long-term mortgages, since operations were begun in 1917. The various banks in the system hold about one-fourth of the farm mortgages in the country. They have made money available at low rates of interest and usually for terms of 33 years. In 1923, the latest date when a study of institutions of all types was made, the federal land banks made loans at 5.5 per cent, the rates of the joint-stock land banks were slightly higher, the rates of life insurance companies averaged 5.36 per cent and those of commercial banks averaged 6.89 per cent. Interest rates for long term loans are very uneven over the various regions. In some western states they tend to average between eight and ten per cent. There are economic and physical factors which affect the risk element and consequently the interest rate.

The serious agricultural depression and the maladjustment of agriculture in the world business situation resulted in 1925 in a larger number of defaults on the part of borrowers and foreclosures on the part of the federal land banks than in any previous year. In fact, the number for the year 1925 was almost equal to the total for the years 1917-24 combined.

9. The needs of the agricultural industry for long-term credit are probably more adequately met by exist-

ing agencies than are the needs for other forms of credit. In addition to the Federal Farm Loan System, life insurance companies and banks have had an important part in meeting adequately needs for mortgage loans at fair rates of interest. State rural credit funds for furnishing mortgage loans have been in operation in 17 states, but they have not been of great importance. The most extensive operations during recent years have been in the states of North and South Dakota. In both these states, mismanagement has hampered the effectiveness of the institutions which have been functioning.

10. According to the federal censuses of agriculture, the ratio of mortgage debt to value of farms mortgaged was considerably higher in 1925 than in 1920 and price levels and labor incomes were lower, indicating that the charges upon the farm business for interest upon indebtedness are much heavier.

VI. RURALIZING THE CREDIT SYSTEMS

WE PASS now from our review of studies of the agricultural credit situation to a consideration of other important questions which come to the fore when the social aspects of this matter are considered. The first question to be considered is perhaps the most frequently mentioned of all, namely the matter of ruralizing the credit systems.

In the preceding chapter we summarized the evidence that the banking system of the country had developed without full regard for the peculiar needs of agriculture. The banks did not, as a rule, make intermediate credit available, before the establishment of the intermediate credit banks, and these have only made a beginning in meeting the needs of farmers for loans of from six months to three years. We have noted, too, the extensive failures of small banks in the agricultural states during 1920-26 and the tendency in some sections for the control of credit to pass to the urban centers.

The passing of control of the supply of credit to the urban community raises serious questions. It is true we have reassuring headlines, even in agricultural papers, as for example, the following in the *Country Gentleman*: "Wall Street Welcomes the Cooperative," "Wall Street Loans to John Smith, Farmer." It is sometimes alleged that farmers can get all the short-term credit they need from the big city banks, if they will organize and will give the proper security. There are others who do not regard this situation with satisfaction. They contend that the control of credit should not, in justice, pass to the urban group, wihch is likely to misunderstand the difficulties of agriculture. They believe in exalting the country bank, with its personal contact with the farmer. They incline toward changes in the banking structure and in banking rules which will make the whole system of national and state banks as serviceable for agriculture

as for any other industry. It has been suggested, for example, by Dr. Claude L. Benner, that local banking customs in regard to making short-term loans could in many instances be changed. Dr. Benner suggests[1] that bankers in certain well-established agricultural areas could well give longer maturities to the best secured agricultural loans. He contends that this would not necessarily result in "frozen" assets—a great difficulty with country banks has frequently been not "frozen" assets but loans which turned out to be worthless. He justifies his position, in correspondence with the Department of Research and Education, by the following argument: "Bank loans must be kept liquid, nevertheless in well-established agricultural areas longer maturities could be given to the best secured agricultural loans. This is possible because rural banks are unlike the ordinary commercial banks; their deposits have a much slower turnover than do those in urban centers." It has also been suggested that if local bankers diversified their investments and put a portion of their funds into marketable securities, the proportion of failures among agricultural banks would not be so high. We have noted that the farmers of the South and West particularly have need of short-term bank credit—they are carrying on with the burden of costly merchant credit. These are obvious shortages which it would seem should in some way be met.

There are current the following suggestions: (1) organize more state and federal banks; (2) organize small cooperative credit unions; (3) set up more state-wide agricultural credit institutions, which have been formed to make short term production loans to farmers particularly during the production season, at fair rates of interest.

Those interested in the consumers' cooperative movement and also some of the leaders of farmers' cooper-

[1] *Journal of The Farm Economic Association*, January, 1925, p. 94.

ative marketing associations advocate supplanting the existing bank system by organizing cooperative banks, credit unions, etc. There are, however, as noted, few rural credit unions and practically no rural cooperative banks. Rural America has not been a fertile field for cooperative credit organization. It remains to be seen whether the cooperative principle will be more widely applied than in the past, or whether the farm group will rely upon improvement in the present banking system for more adequate credit. It is of great interest that the Rural Life Bureau of the National Catholic Welfare Conference is committed to the organization of local credit unions.

Among the suggestions for increasing the supply of intermediate credit are the following: (1) education of local bankers to make more use of the facilities of the intermediate credit banks for the rediscounting of paper having a maturity of six months to three years, and (2) the formation of more agricultural credit corporations which are allowed to borrow $10 from the intermediate credit banks for every dollar of capital and surplus which they have.

The chief questions suggested by this section which might be discussed by those reading this pamphlet are:

(1) How and through what agencies shall agriculture secure access to an adequate supply of intermediate credit —i. e., with maturity of six months to three years—for marketing, production, the purchase of equipment and necessary improvements in the farm business?

(2) What shall be done about the passing in some sections of the control of the supply of credit from the rural to the urban community?

(3) How and through what agencies should the rural South and West get an adequate supply of short term credit at fair rates of interest?

VII. GOVERNMENTAL CONTROL OVER CREDIT RESOURCES

IN our review of the major agricultural developments during the period under consideration we noted the influence of the Federal Reserve System upon the credit market of the country, particularly through its control of the rediscount rate for making funds available for member banks. This control may be exercised with most effect in a business situation such as that of 1919-1920. Then prices were rising, the volume of business was expanding, the volume of loans by banks was increasing and banks that were members of the Federal Reserve System were borrowing heavily from the Federal Reserve Banks. In this situation, the raising of the rediscount rate reduced the volume of loans by member banks and was a factor in bringing about the deflation of 1920-21. We have noted, too, that studies made by the Joint Commission of Agricultural Inquiry indicated that there was immediately a reduction in volume of credit on the part of Federal Reserve Banks to member banks in urban territory but that there was an expansion of credit on the part of Federal Reserve Banks to member banks in agricultural districts through 1920 and to the summer of 1921. Agricultural prices dropped rapidly during this period, however, and agriculture was in a state of extreme depression. We have also recorded that the chief criticisms of Federal Reserve Board policy in 1919-20 have been two: (1) That the rediscount rate was not raised early enough during the boom period so as to check it; and (2) that the raising of the rate was delayed because of the desire of the Treasury Department to float the victory loan. The Joint Commission of Agricultural Inquiry contended that the delay, the raising of the rediscount rate, plus the drastic increase in 1920, resulted in making agricultural price declines un-

duly rapid and in aggravating the distress of the industry.

There are various views among economists as to the influence which the Federal Reserve Board through changes in rediscount rates—and also through transactions in securities—has had upon the business cycle, since 1921 or 1922. There are those, who hold that the business cycle has been definitely "managed" since 1922 by these techniques of the Federal Reserve Board. Certain leading members of the group responsible for the Harvard Economic Service subscribe to this view. They state that this "management" has been made possible by the presence of certain favorable factors and that the passing of these factors may make such control less influential in the future. On the other hand, there are those who contend that during the past two years, when the borrowings of member banks from the Federal Reserve Banks have not been heavy, changes in the rediscount rate have had comparatively little influence upon the credit market and upon the business cycle. There are also reports from the most reliable sources that changes in the rediscount rate have been made during this period for the purpose of assisting Great Britain to maintain her currency on a gold basis, because it is to our advantage to have Great Britain on a gold basis, and that our own Federal Reserve Board Policy has been influenced by a "gentlemen's agreement" with the bank of England and not by business conditions in the United States.

There are constant discussions in the farm press as to the relation of the Federal Reserve Board to the agricultural industry. The Federal Reserve Act has been amended so as to require that one of the members of the Federal Reserve Board shall be a person who has been identified with the farming interests. President Harding appointed such a man in 1922. It is a question, however, whether an appointment of this kind is of any value to agriculture, even if the credit resources of the Federal

Reserve System should be managed with bias in favor of urban industry.

Various changes in the Federal Reserve Act which have been made during the past few years—reviewed in Section IV of Part I—have opened the door to a much wider participation on the part of agriculture. The Federal Reserve Banks can now rediscount certain kinds of agricultural paper which they could not in 1920. These changes in the Act were stimulated by the report of the Joint Commission of Agricultural Inquiry in 1921, which went on record as favoring reorganization of the present banking system so as to secure better participation for agriculture, and by subsequent work of the Farm Bloc in Congress.

One other proposal sometimes mentioned in order to secure full advantage of the Board should be mentioned here. The argument of its advocates is somewhat as follows: During the past six years the Federal Reserve Board has exerted an influence upon the credit market but it has done so without any direct instructions from the various industries, and particularly, without instructions from the agricultural industry. Some have said that there should be created a Council of Agriculture, fully representing the industry, which should exert its influence from time to time upon the Federal Reserve Board so as to assure the use of techniques which will put agriculture upon a basis comparable to that of the other industries. This council might also advise other branches of the federal government. The creation of such a council would give a representation to the occupation in the councils of government which is not possible under the present system of election of representatives to Congress. Those who have advocated this plan incline toward the setting up of an organization which would provide unofficially, but openly, occupational representation, at least to the extent of advising the government. Others who want to achieve much the same ends have contended that Congress should give orders

to the Federal Reserve Board as to how it should manage the credit market of the nation in so far as it has powers of management.

Behind these proposals lies the conviction that the Federal Reserve Board is, consciously or unconsciously, unduly influenced by the power of urban finance and that some measures need to be taken which will assure to the agricultural industry fair participation in the credit resources of the nation. There has also been lay opinion that during the years 1922-26 the Federal Reserve Board did not sufficiently exert its influence to facilitate the adjustment of agriculture to the world business situation. On the other hand, it is denied by bankers and economists that the Federal Reserve Board could have done anything more than was done, in order to facilitate the recovery of agriculture. They contend that the adjustments necessary to assure to agriculture a satisfactory price level must be worked out within the industry; and that the industry has not made the necessary changes in production program and has not adopted commercial technique rapidly enough.

The usual view of the technicians who have studied banking structure and principles is to urge a scientific administration of matters relating to credits. This is what the economists offer[1] as the most hopeful method of assuring to agriculture fair participation in credit resources within the control of the Federal Reserve Board. How to attain this end is a question which groups of rural leaders may well discuss thoroughly.

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[1]See two recent studies by competent students: Benjamin H. Beckhart, *The Discount Policy of the Federal Reserve Board*, New York, Macmillan Company, 1924; also Clara Eliott, *The Farmers' Campaign for Credit*, New York, D. Appleton & Co., 1926.

VIII. THE QUESTION OF USURY

INTEREST upon money is a topic with which the church was once much concerned. There was an era in which the pronouncements of the church fathers opposed the taking of any interest, which was then known as usury. As the system of economy changed, sanction was given to interest but usury, defined as the charging of exorbitant interest, was condemned. The teachings of the Protestant reformers were opposed to usury. Catholic social teaching still opposes usury, while Protestantism in its recent development has ignored the question.

Usury is generally understood to mean the taking of interest at a rate higher than the maximum prescribed by law. There is plenty of evidence that it is widespread in the field of agricultural, as well as other loans. A thorough study of the topic was that of Franklin W. Ryan, instructor in business reports, Graduate School of Business Administration, Harvard University, entitled *Usury and Usury Laws*.[1] The sub-title indicates its scope: "A Juristic-Economic Study of the Effects of State Statutory Maximums for Loan Charges upon Lending Operations in the United States."

This book was one of the Hart, Shaffner & Marx Economic Series. Mr. Ryan says in his introduction: "After a period of more than thirty years during which comparatively little was said or written about usury and usury laws, the American business world was startled in the autumn of 1915 by the statement of John Skelton Williams, Comptroller of the Currency at the time, that more than one-third of the national banks of the United States had been exacting usurious rates of interest."

Mr. Ryan has a chapter entitled "How the Usury Laws Have Operated in the Field of Agricultural Loans."

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[1]Boston and New York, Houghton, Mifflin & Co., 1924.

He compares the data upon prevailing rates of interest for first mortgages upon farm property charged by banks in March, 1921, as reported to the division of agricultural finance of the United States Department of Agriculture[2] with the maximum rates allowed by the usury laws of various states.

We quote his conclusions: "From the statistical data here shown, it would appear that some states 'enforce' their usury laws and that some do not. Thus in the six per cent area, it looks as though New Hampshire, New York, New Jersey, Pennsylvania, Delaware and Maryland have been successful in keeping down interest rates by the usury laws. Yet we know that in New York the prevailing time-money rates in the years 1920-21 were as high as 8 per cent, and that on mortgage loans there were frequent evasions. It is clear, therefore, that in some states bankers have made out their notes to show contract rates within the usury law limit and yet have evaded the law in other ways. This invalidates much of the material where it appears that the usury laws have been strictly enforced.

"Let us note the five states which have no usury laws and where the bankers were free to report approximately actual conditions. These are Maine, Massachusetts, Rhode Island, Colorado and Nevada. We find from the returns from these states that interest rates in them were not greatly different from those in similar states with usury laws. Colorado with no penalty for usury has a somewhat lower rate than Wyoming with a twelve per cent maximum. Massachusetts with no usury law has about the same rate as New York with its strict six per cent maximum. The Massachusetts rate is, indeed, somewhat lower than the actual rates in Vermont which has a six per cent maximum.

"It is particularly interesting to note that in the five southern states, South Carolina, Georgia, Alabama, Loui-

[2]V. N. Valgren, *Farm Mortgage Loans*, Department Bulletin 1047, United States Department of Agriculture.

siana and Mississippi, all with eight per cent maximums and all in one area, the usury laws are apparently not very well enforced, for the bankers have not hesitated to report contract rates above the eight per cent limit. But the four northern states having eight per cent maximums, Ohio, Indiana. Iowa and Missouri, seem to have 'fell-enforced' usury laws, to judge by the returns. . . .

"Compare North Dakota with its ten per cent maximum with South Dakota with its twelve per cent maximum. We find that the prevailing rate in South Dakota is 7.55 per cent, and lower than the prevailing rate of 8.35 per cent in North Dakota. Compare Wisconsin with its ten per cent legal maximum with Illinois having a seven per cent legal maximum. Wisconsin's prevailing rate of actual interest charges is 6.31 per cent, and that of Illinois is 6.32 per cent, practically the same. The three points extra margin in Wisconsin has had no effect upon the situation. Michigan, with its seven per cent maximum has a prevailing rate of 6.62 per cent which is actually higher than the rates in the neighboring states of Wisconsin and Illinois. Michigan's prevailing rate is also higher than the rates in Iowa, Ohio and Indiana, which have eight per cent legal maximums.

"California, which had no usury law until 1918, now has a twelve per cent maximum. This law appears to be 'well-enforced' from the returns given. Yet California's prevailing rate of 7.20 per cent is a full point or more above the prevailing rates of the New England states having no usury laws.

"It is noteworthy that the prevailing rates of Vermont (6.05), Virginia (6.17), West Virginia (6.06), North Carolinia (6.12), Kentucky (6.45), Tennessee (7.51), Georgia (8.28), Alabama (8.18), Louisiana (8.24), are all higher than the usury laws of those states allow and all higher than the prevailing rate in Massachusetts which has no general usury law.

"Colorado's prevailing rate of 8.58 per cent and Nevada's prevailing rate of 8.62 per cent are lower than

the prevailing rates in such states having usury laws as Arizona, Idaho, Oklahoma, Texas, Arkansas, Montana, Wyoming, Utah, and New Mexico. Colorado, with no penalty for usury, is nearly surrounded by the usury law states, Wyoming, Utah, Arizona, Texas and Oklahoma, and yet has lower prevailing interest rates on first mortgage farm loans, according to the government returns, than those states.

"In carrying on the research work of preparing [Department of Agriculture] Bulletin 1047, no attention was given by the writers to usury laws. It seems very evident that the prevailing rates that were worked out were very little influenced by usury laws, except in the cases noted where banks must resort to the various devices used to evade usury laws."

It is evident that interest rates do not fluctuate in the various states according to the maximum provision in the usury laws; that they differ for states which have no usury laws; that they vary for the reasons given by the economists quoted in chapters two and four.

Various suggestions are made to improve the situation:

It is sometimes advocated that all usury laws be repealed on the theory that interest rates are determined by other factors than state laws and that when conditions are such that prevailing rates are usurious, there are always means of evading the law. This would leave the bankers free to vary their interest charges according to the element of risk. It is the contention of those who advocate this plan that if the banks might legitimately make loans at varying rates of interest, this would tend to drive out the disreputable money lenders.

Mr. Ryan says: "The best measures that are being taken are along the lines of pooling the credit standing of the community and building up the economic solidarity of the farm neighborhood. If the results obtained by this method in European countries can be gotten here, it will not be many years until interest rates will be

much lower in the agricultural sections of the South and West."[3] This is an advocacy of the development of local cooperative associations.

He also points out that "in those states where diversified farming has reached its highest development interest charges are lowest, while in those states which are still in the pioneer stages and which are still concentrating on one cash crop, 'mining the soil,' the total interest charges are highest."[4]

He also regards the work of the Federal Farm Loan Board as an important factor in promoting the flow of capital into the agricultural regions and lowering rates of interest. He holds that "the present-day problem of the farmers of the United States as to getting lower rates on farm loans can never be solved by usury laws."[5]

Another suggestion sometimes made is that the prevailing rate of interest is dependent, like other aspects of credit, upon the status of the farm business—if agriculture were better adjusted to the world business situation, then many of the difficulties of borrowing money at fair rates of interest would disappear.

The question raised by this discussion is therefore: By what methods can the agricultural industry be assured of fair rates of interest upon the various kinds of loans which are needed; i.e., long-term, intermediate and short-term credit?

Our review of data available upon the agricultural credit situation disclosed that rates for short-term merchant credit are exceedingly high in all areas. The study in New York State by Leland Spencer[6] was noted in chapter four and the conclusions should be referred to here because they contain suggestions as to methods of improving the situation: "The cost to the stores of fur-

[3] F. W. Ryan, Op. Cit., pp. 107-108.

[4] F. W. Ryan, Op. Cit., p. 108.

[5] F. W. Ryan, Op. Cit., p. 184.

[6] *An Economic Study of Rural Store Credit in New York.* Ithaca, N. Y., Agricultural Experiment Station, Bulletin 430, 1924.

nishing this credit service is equivalent to twice or three times the usual charge for bank loans. The stores borrow from the banks at the same rate as do the farmers, and in addition to the interest which they either pay for the borrowed funds or forego on their own capital, they incur many other expenses in giving credit to their customers. The result is that country merchants are compelled to take wider margins and to charge higher prices than they would if they were not called upon to furnish this service. Under the present system the cost of store credit is paid in general by all buyers, including those who do not benefit from this service. A system of adequate discounts for cash should be encouraged, since this is an effective method of assessing the cost of credit against only those who receive it. While a limited amount of store credit may be justified as a convenience in trading, it is an uneconomical source of farm capital."

IX. GOVERNMENTAL ASSISTANCE VS. LOCAL COOPERATION

DURING the war and the post-war period, the most widespread method of meeting shortages in agricultural credit was to set up federal agencies to loan funds to local institutions. This was done through the establishment in 1917 of the Federal Farm Loan System—including the federal land banks and the joint-stock land banks—and the founding in 1923 of the intermediate credit banks. Certain rural sociologists have generalized upon this development by saying it is the "American" way of supplying credit to farmers, contrasting it roughly with the "European" way of developing local cooperative institutions and conserving local resources, as has been done extensively in Germany, Finland, Sweden, Poland, Denmark, Austria, Russia and other countries. The question whether governmental assistance on a large scale is likely to be of permanent value, is one which is involved in all our thinking and planning for a more adequate agricultural credit system.

The sum of the experience of the Federal Farm Loan Board in serving local farm loan associations, as dealt with in Part I, throws some light upon the question. The purpose of the law establishing the banks was that they should eventually be owned and controlled by the local farm loan associations. The development has not been in accord with the purpose of the law for the following reasons: Local associations have been organized rapidly for the purpose of securing loans for their members from the Federal Land Banks, but these local groups seem not to be much interested in anything beyond those transactions. There has been no provision for educating the officers of the small associations, with the result that many are incompetent and it has been impossible for the Federal Farm Loan Board to secure reports from many of the secretary-treasurers. Farmers in general have not

rallied to the local associations and have not developed an interest which would indicate that they were desirous of taking the system over. It is also certain that some of the members of the Federal Farm Loan Board, and some of its officials, have not been inclined to encourage the development of a genuinely cooperative system, though others allege that the apathy of the farmers has been too great. Finally, the changes in the method of control which were made by the Agricultural Credits Act of 1923 have practically taken away from the local associations the power to control the land banks. (See pages 20 and 21 of Chapter 2.)

Experience indicates plainly that the Federal Farm Loan Board created by Congress has not established a cooperative system. It is alleged by some students that this is the usual experience of governmental agencies—that they do not or can not establish genuine cooperative societies. (There are apparently exceptions, as in the case of the credit cooperatives of India, fostered by the British government.)

However, it must be recognized that others contend that the Federal Farm Loan System, even if it has been carried out as its founders planned, could never have been a "truly cooperative" institution, and would have only been a "mutual" institution. This is a technical distinction, but is considered important by cooperative leaders and by economists. The "truly cooperative" system is regarded as one which springs out of local development, is thoroughly democratic in design, and requires a high degree of participation in the responsibilities of ownership on the part of the individual member. It is alleged that our government-assisted farm loan system never had in it the germs of a cooperative institution.

The work of the Federal Farm Loan Board involves elements for both the agricultural statesman and the social engineer to consider. Should the agencies and persons interested in meeting the permanent credit needs of agriculture recommend the establishment of govern-

mental agencies? Or should they encourage the development of local group cohesion and the conservation of local resources, as the permanent basis for a credit system?

X. THE RELATION OF CREDIT TO SOCIAL INSTITUTIONS

NO studies have as yet been made which indicate precisely any relationship between agricultural credit conditions and the status of the social institutions such as the church, the school, social work, etc. However, it has been the judgment of individual students who have had wide contacts that the reorganization of rural credits and the meeting of obvious shortages would greatly assist in securing better social institutions. We are informed, for example, that officials of the General Education Board who studied conditions among Negroes of the rural South a decade or more ago, concluded that improvements in credit institutions would be of great benefit to the social institutions.

It has also been thought that better credit conditions might lead to less subsidizing of our rural institutions. This is a very complicated question, and a discussion of it would require intensive study. Subsidies of rural institutions are common in all agricultural areas. Enlarging the organization area might make the subsidy of small institutions unnecessary in many instances. It is the conclusion of officials of the Rural Communities Department of the National Board of the Y. W. C. A. that if a large enough area is included in the district organization which employs a local secretary, subsidies are unnecessary. It is thus, to a considerable extent, a problem of securing an organization technique which will enable small local groups to pool their resources.

It is obvious, however, that social institutions and their leaders, are concerned about the great needs of agriculture for adequate credit and about such matters as ruinous interest rates, just as they are about other aspects of the agricultural industry and about adjustments which will bring about improvement and a more satisfying life. Though they may not actually organize credit institu-

tions, they may serve the rural districts as leaders in educating the community as to the facts about the agricultural credit situation and as to its relation to the social welfare.

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